THIS IS SIMPLY A SAMPLE PROVIDED TO PROSPECTIVE RANGE USERS AS GUIDANCE.

TEST # ……..

…….. Test Plan

[Date]

Naval Undersea Warfare Center
Division, Newport

Test conducted at Narragansett
Bay Shallow Water Test Facility
Newport, RI USA

Document No	**Test # [Test#]**	Copy No.
Title:	**[Project Name] Test Plan [Month Year]**	
Applicability:	Range Area [North, Outer, Hole Area, EX-SALMON Site]	
Document Type:	Acceptance Test Plan	

Prepared by:

Agreed by.

Agreed by: Project Safety Officer

Authorized by: Project Manager

[PROJECT NAME]

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[PROJECT TEST PLAN [MONTH / YEAR]

1. INTRODUCTION

2. OBJECTIVES

The Objectives of the Test are as follows:

a. To demonstrate the …….

b. To demonstrate the ……

c. .

d. .

3. ORGANIZATION AND RESPONSIBILITIES

Function	Name	Organization
Project Manager		NUWC
Overall Test Director		
Systems Engineer		
Launch		
Recovery		NUWC
Data recording		
Financial POC		

.

4. AUTHORIZATION FOR TRIAL

4.1 Authorizaion and responsibility for Test charges for the trial has come from ……. (Activity/NUWC Code).

5. PARTIES TAKING PART

(All personnel entering Stillwater Basin must be badged by NUWC Security.)

5.1 The following parties are taking part in the trial:

Personnel from,

Personnel from NUWC, Newport, Rhode Island, USA.

Personnel from

6. FACILITIES

6.1 The following are the main facilities and vessels employed:

a. Test equipment provided by

b. Command/control vessel, TWR - 841, and targets provided by NUWC,

7. AREAS AND TIMING

7.1 The area to be used is …….. miles out of Newport in the Atlantic in approximately feet of water. The operational test area will be a box bounded by the following LATLONG coordinates:

41 33.500 N 71 20.900 W

…

7.2 The tests are planned to take place over the period between [date span] [year], 20% contingency time will be planned for the possibility of unfavourable weather conditions.

8. SAFETY

8.1 All members of the Recovery team shall read and sign SOP RD - T - 20 Heavy Recovery procedure …….. and the [SOP's] which cover the relevant Health and Safety matters for the Test.

8.2 Prior to underway, the Recovery Team Safety Observer will conduct Heavy Weight Torpedo Explosives Hazard Briefing with all crew and test personnel; the ship's captain will also conduct a pre-sail briefing at the same time. At the start of each day the Test Director will brief the team members on the objectives and activities for the day and any particular things to be aware of or pay special attention to.

9. RISK ASSESSMENT

Hazard	Risk	Risk Reduction	Residual Risk Assessment
Falling into water	Drowning	Lifejackets will be worn at all times when in the vicinity of the water.	LOW
Cold / Wet Weather	Hypothermia	Suitable foul weather clothing will be worn.	LOW
Hot Weather	Sunburn / Heat-stroke	Sun-tan lotion and hats will be used as appropriate.	LOW
Bad weather / Rough Seas	Minor Injuries from falls / knocks.	Termination of the trial if conditions considered unsafe by the trial director, the coxswain or the master of the vessel.	LOW
Minor Accidents	Minor Injuries	First aider in attendance.	LOW
Major accidents	Severe Injuries	First aider in attendance. Contact with emergency services by means of mobile phone.	LOW
RIB disabled / sinking.	Drowning / Hypothermia / Heatstroke	Lifejackets will be worn. Contact with emergency services by means of radio	LOW
Manual Handling	Limb/back injuries	Use appropriate lifting equipment	LOW
Vehicle Propellers	Minor abrasion	Keep clear of moving parts	LOW
Umbilical cable	Cuts and entanglement	Take care when handling fibre – wear gloves	LOW
Fibre optic drum	Cuts and abrasion from rotating drum	Wear gloves to protect hands	LOW
Electrical	Electric shock	Use of GFI on all circuits.	LOW

10. QUALITY ASSURANCE

10.1 Regular calibration of all test equipment used on the [test] system.

11. SECURITY

11.1 The security classification for the Test is [all NBSWTF personnel have a Confidential or higher clearance] ……..

11.2 Details relating to the performance of ……. and any vehicle design data are . classified Confidential ……..on.

12. CONDUCT OF THE TEST

12.1 The Test Director is responsible for the aims and direction of the trial and is responsible for the day to day running and safe conduct of the trial.

12.2 Any deviation from these Test Orders must be authorized by the Test Director.

12.3 The RIB used in this trial will serve as a recovery platform and as a rescue / guard boat to prevent other leisure / working craft from entering the test area. This will require the RIB driver to proceed to intercept in a safe and competent manner any craft heading into the Test area during a vehicle test run.

12.4 The Test Director will maintain a Test Log throughout the Test period. This log will form the basis of the Test records and contain comments on all aspects of the vehicles performance for each test run.

12.5 The Test Director will also ensure Test run data sheets are completed with all necessary information after each test run and suitably filed for later examination during comparative assessment.

12.6 The Test Director will ensure all console and vehicle data is recorded.

12.7 Separate logbooks will be used to record any problems with the vehicle and its associated equipment and the action taken to rectify the problem and prevent it happening again.

12.8 Launching / recovery and safe operation of the ….. vehicle will be carried out in accordance with the Operating Procedures (Reference 1).

12.9 Setting up and operation of the….. test vehicle …..will be in accordance with the Operating Procedures (Reference 1).

13. TEST PLAN

13.1 Prior to the ship anchoring the … System compass requires to be calibrated and this is performed by the ship performing two complete 360 degree turns taking at least one minute for each complete turn. Once the Test Director is happy with the compass set-up the ship can proceed to anchor at Site Alpha.

13.2 The ship should be anchored within the specified distance to the target (plan range) in a position down current of the target. The location of the target (range and bearing or Lat/Long) should be recorded and entered into the console together with any required waypoints.

13.3 With the ship anchored the Trackpoint II pinger pole should be deployed and a number of calibration checks carried out using a transponder deployed from a small boat at cardinal points around the ship at a range of 250m. Once the Test Director is happy with the Trackpoint set-up the Test can proceed.

13.4 After having functionally tested the command console and vehicle in accordance with the operating procedures the vehicle should lowered into the water in its launch frame to a depth of approximately 5 m.

13.5 Once deployed, and on command from the pilot, the vehicle should be released from the launch frame. At this point the pilot should take control of the vehicle and fly the mission as defined in the table below. During the Test the data defined in paragraph 18 should be recorded.

13.6 The following table defines the variation in the Test to be conducted during the Test programme.

Note: Trial 2 will only be conducted with a fibre optic dispenser if the vehicle successfully recovers from the maximum depth in Trial 1 with a reinforced tether fitted.

14. COMMUNICATIONS

14.1 Radio Communications with the Test team when at sea can be made via Phil DeNolfo on (401 832 2662) or Marine OPS aT (401 832 4594). TWR – 841 CELL Phone (typically out to 10 – 20 miles offshore) is 401 842 7725. MarineSAT phone (typically out to 100 to 200 miles offshore) is 888 xxx xxxx.

14.2 Communications between the Test Director and key members of the Test team during Test OPS will be by radio supplied by the MARINEOPS office.

15. LOGISTIC SUPPORT REQUIREMENTS

15.1 Transfer of the equipment to Stillwater Basin will be the responsibility of .

15.2 Transfer of the equipment to NUWC will be the responsibility of .

16. TRAVEL AND ACCOMMODATION

16.1 The … Test and Logistics Manager will arrange travel and accommodation arrangements for … personnel.

16.2 Other personnel attending are to make their own arrangements for transport and accommodation.

17. RECORDS AND ANALYSIS

The following records will be kept:

17.1 Log of all Test events.

17.2 Test data as required by

17.3 Photographs and diagrams of the set up.

17.4 Vehicle Sonar and vehicle camera displays.

17.5 Target position, weather conditions and sea state during the trial.

18. REFERENCES

a) … Operating Procedures –

ANNEX A SAFETY INSTRUCTIONS

A.1 General

A.1.1 … requires that all Tesst be carried out with full recognition of the hazards involved and with adequate precautions for the safety of all personnel. Individuals are reminded of their own responsibility to take reasonable care of their own health and safety and that of others.

A.1.2 All members of the Test Team should familiarise themselves with the Safety Instructions of this Annex.

A.1.3 The Health and Safety at Work Act makes it clear that the onus is on the individual to take all reasonable precautions to protect him/herself

A.1.4 Any member of the Test Team who identifies a hazard not included here, should draw it to the attention of the Test Director or Safety Observer or vessel Captain, who will take the necessary action.

A.1.5 The Test Director and Safety Observer are responsible for the safe conduct of the trial and its overall management.

A.1.6 The Diving Contractor (if required) is responsible at all times for the safety of the diving operations.

A.2 Personal protective equipment

A.2.1 Any member of the Test Team involved in loading equipment will require

a. Safety hat;
b. Protective (steel toed, ANSI approved) footwear;
c. Waterproof clothing;
d. Lifejacket, when working close to the waters edge; (provided by vessel)
e. Gloves when necessary.

A.2.2 All personnel will use the lifejackets provided while in the RIB.

A.3 Electrical safety

A.3.1 The following apply:

a. All electrical equipment that is not double insulated will be grounded.
b. All instrumentation is to be clearly marked with its supply requirements and fitted with the correct fuses.
c. No makeshift power connections are to be made.
d. No item of instrumentation is to be operated outside its housing except for maintenance purposes, at which time the Test Director must be informed.
e. All electrical equipment and associated power leads will be tested and approved prior to the Trial.
f. RCCBs will be used where appropriate, i.e. mains powered underwater equipment.

A.4 Mechanical handling

A.4.1 All lifting equipment must have current certification and must be clearly marked with its maximum Safe Working Load.

A.4.2 Lifting equipment is to be used for its intended purpose only. It must not be modified or uprated.

A.4.3 Hardhats must be worn in the vicinity of suspended loads and in designated 'Hard Hat Areas'.

A.4.4 No person should at any time pass beneath or stand under any slung load.

A.4.5 Protective footwear should be worn at all times during loading and unloading operations.

A.4.6 Test Team members who are not directly involved with the current operation must keep clear of the working area.

A.4.7 No Test member is to be alone on unprotected platforms with sea access at any time.

A.4.8 Particular attention is drawn to hazards of coiled ropes, cables and vehicle umbilical. No person is to stand within or step through a coil of cable or rope. Neither should they allow any other person to stand within or step through a coil of cable, rope or umbilical.

A.5 First aid and medical screening

A.5.1 A first aid kit will be available from vessel crew.

A.5.2 Any incident requiring First Aid must be reported to the Test Director and noted in the Test Log.

A.6 Emergency Procedures

A.6.1 The Test Team is at greatest risk during deployment and recovery of the vehicle. Procedures are laid out for these operations and must be followed.

A.6.2 In the event of an accident requiring the emergency services, the first point of contact will the Test Director. An accident report must be completed in these circumstances and copies will be held by the Test Director.

A.6.3 Next of Kin details must be supplied to personnel prior to the Trial by all … personnel involved.

A.7.4 The official [Project Code] point of contact at … during office hours will be:

Mr. ……. At 401 ……..

Distribution

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